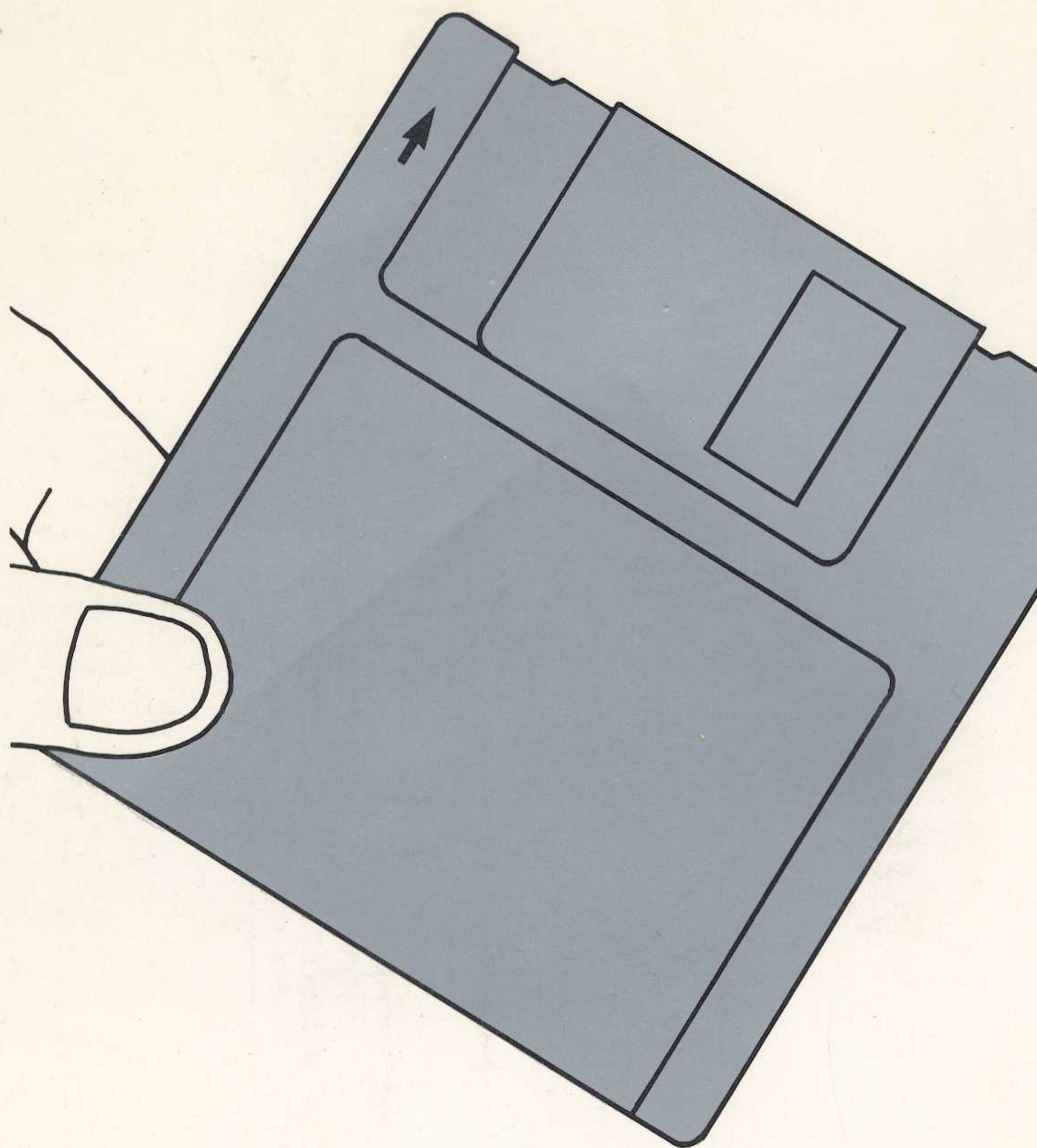


Compumed

P.O. Box 6427 • Salinas, California 93912

**The Mirror
Disk Copier
for the C128/64**



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THE MIRROR DISK COPIER
C64/128

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THE MIRROR DISK COPIER

Introduction

CONGRATULATIONS!

You have just purchased the finest disk copy system available for the C64 or C128 computers. The Mirror Disk Copier is designed to allow you to backup practically all of your protected software. The Mirror will even backup itself.

WARRANTY:

Should you find your Mirror disk to be defective within the first 30 days. We will replace or repair it free of charge.

This warranty applies to the registered owners only and is non-transferable.

UPDATES:

The effectiveness of any disk copier diminishes with time. Manufacturers of copy protection will purchase the Mirror and will attempt to produce protection schemes that it won't be able to copy. It is for this reason we have a liberal update policy.

You may return your original Mirror disk and get an updated copy at any time for a charge of \$3.00 plus \$3.00 shipping and handling (\$6.00 total). This offer applies to registered owners of the Mirror only and is non-transferable.

WARNING

It is illegal to sell or otherwise distribute copies of copyrighted software. Software companies have a right and necessity to make a profit on their product. Unlawful distribution of their software not only harms them it harms you! It is not unlawful to make backup copies of your own disks for archival purposes.

This product is intended to be used in a lawful manner.

THE MIRROR DISK COPIER

C64 Menu

Booting Procedure: C64

To boot your Mirror disk simply insert it in your drive and type **LOAD "*",8,1** and press <return>. The screen should go black and seven seconds later the main menu should appear.

After it has booted you will be presented with the menu screen.

Menu: C64

There are eight basic menu items incorporated into the C64 Mirror. These are:

- 5) COPY TRACKS 1-35
- 6) COPY TRACKS 1-36
- 7) COPY TRACKS 1-37
- 8) COPY TRACKS 1-38
- 9) COPY TRACKS 1-39
- 0) COPY TRACKS 1-40
- S) COPY SINGLE TRACK

AUTOMATIC HALF TRACKING OFF

To select from the menu press the key that is associated with your selection. Leave your Mirror disk inserted until after you have selected.

It is not necessary for you to understand how the drive or copy protection works, all modes are completely automatic. Most disks can be copied with mode# 0 (40 tracks).

To determine which mode to use to copy your particular program check the **SOFTWARE LIST** on your Mirror disk. If it is not listed there try mode# 0 first.

AUTOMATIC HALF TRACKING: One very important feature of this program is its ability to automatically half track. If this mode is selected then the copier will even copy data that is written between tracks. This is not required for most software. This mode is toggled on and off by pressing the 'F1' key.

COPY SINGLE TRACK: You may use this mode to copy any single track on the disk. After pressing S you will be asked which track to copy. Use the 'F1'/'F3' keys to move the track indicator in half track increments. After selecting the track you will be asked for the bit density. You may simply press the return and have the computer select the proper bit density for that track or you may manually override the automatic selection by pressing keys 0,1,2,or3 which in turn selects one of the corresponding four bit density zones available on the C64.

THE MIRROR DISK COPIER

C128 Menu

Booting Procedure: C128

To boot your Mirror disk simply insert it in your 1571 drive and turn on or reset your C128. The Mirror is an autobooting program when used with a C128. The Mirror will automatically sense whether your computer is in 40 or 80 column mode and adjust itself accordingly. The C128 mode may only be used with a 1571 drive.

After it has booted you will be presented with the menu screen.

Menu: C128

There are four basic menu items incorporated into the C128 Mirror. These are:

- 1) COPY BOTH SIDES
- 2) COPY SIDE ONE
- 3) COPY SIDE TWO
- 4) COPY C64 DISK

To select from the menu press the key that is associated with your selection. Leave your Mirror disk inserted until after you have selected.

If you attempt to copy a disk that is one sided with either the COPY SIDE TWO or COPY BOTH SIDES options then you will get a message that side two is blank.

Copying time for a single side should be around 60 seconds. Copying time for two sides should be two minutes.

C64 DISKS:

You may copy C64 disks in either the C64 mode of your C128 or in the C128 mode. By placing your C128 in C64 Mode you may run the C64 copier just as though you had a C64. This is the most effective way of making copies of C64 software.

You may also copy C64 software by placing your C128 in C128 mode and using the COPY C64 DISK option. This way will be much faster than copying in C64 mode but it is also less effective. If you have trouble copying a program in this mode place your computer in the C64 mode and use the C64 copier.

THE MIRROR DISK COPIER

Software List

Booting Procedure: Software List

To boot your Mirror Software List simply insert the Mirror disk in your drive, type **LOAD "software list",8** and then press <return>. After it has loaded type **RUN**.

After it has booted you will be presented with instructions regarding the list. Press the space bar to advance to the list.

The purpose of this list is to provide the user with specific instructions on how to copy specific pieces of software. The list will tell you which mode of the Mirror to use in the copying process as well as which patch to use if one is required.

Patches:

Some programs are hard to copy or have portions of the disk that are uncopyable by any copier. In many of these cases we have developed special situation programs call patches that are used after you have first made a copy with the 40 track mode. The patch will modify your backup disk in some way and make it operable. The patch will either place what is missing on your backup copy or it will modify the loader so that there is no protection on the disk.

Loading Patches:

Patches may be loaded and run in two ways. The most straightforward way is to load them directly from the Mirror disk. To load a patch type **LOAD "patch name",8** and press <return>. Then type **RUN**. All of the patches are stand alone programs. You may load and run any of them without loading the Software List.

The second way is to load and run them from the Software List. As you view the list, you may press the '**F1**' key at any time. This will provide you with a prompt to enter the program number. Enter the number that corresponds to the program you wish to patch and press return. Be sure the Mirror disk is in the drive or the load will fail. After the patch has loaded, you will be prompted to insert your backup copy. Follow the instructions and in most cases you should receive a working copy.

Remember, patches may only be used after first making a copy with the 40 track mode. Patches will only run on a C64 or a C128 in C64 mode.

THE MIRROR DISK COPIER

Rocket Loader

Booting Procedure: Rocket Loader

To boot your Rocket Loader simply insert the Mirror disk in your drive, type **LOAD "rocket loader",8** and then press <return>. After it has loaded type **RUN**.

After typing **RUN** the screen should say **ROCKET LOADER** and then return you to the **READY** prompt. You may now load most programs five time faster than normal.

The Rocket Loader is a program that resides on your Mirror disk along with all of the other programs and patches. The purpose of the Rocket Loader is to provide the user with an ultrafast way of loading programs on the C64. It cannot be used on a C128 in C128 mode. Please note that it loads programs faster not data. If you are going to load a program that loads like data or loads a lot of data in the loading process then you may not experience much increase in speed.

You may also encounter a problem with the program you are loading overwriting the Rocket Loader. If this happens the load will fail. We put the Rocket Loader in the most out of the way place possible but, some programs will still try to load over it.

You find it convenient to use the Rocket Loader to load the Software List.

FOREIGN OPERATION

When using the Mirror in foreign countries it may be impossible to use the Rocket Loader. This is caused by the difference in cycles per second between U.S. electricity and some foreign sources of electricity. The Rocket Loader will only work in a 60 cycle environment.

If you are using the Mirror in an area where there is no 60 cycle source of electricity you must boot the Mirror copier module differently than as described earlier. To boot it type **LOAD "foreign boot",8,1**.

All other instructions remain the same.

THE MIRROR DISK COPIER

Special Notes

Trouble Shooting:

If you are having trouble booting the program the source is most likely one of these:

- 1) All peripheral equipment other than one drive and the monitor must be disconnected from the computer. This includes such devices as: second drives, printers, interface cards, special drive cables, cartridges, or any other device that may use the serial bus.
- 2) It is possible you have a faulty drive. It could be out of alignment or running at the wrong speed. If you are having trouble running other commercial software this is most likely the cause.
- 3) We test every Mirror disk before it leaves and it is unlikely that you will receive a faulty disk. However, if you are convinced that a faulty disk is the source of your problem then contact us for a free exchange.

Backup Copies Won't Run?

If after booting the program you find none of your copies will run, it is likely there is a physical problem with your drive. Here are a few possible sources of trouble:

- 1) You have a cartridge plugged into the expansion port (game port). The Mirror will appear to operate correctly with a cartridge plugged in. However, the resulting copies may be unreliable. Some will run some will not.
- 2) Correct drive speed is critical to the operation of this program. It is more important than for any other program you own. Correct drive speed for the 1541 is 300 RPM. If it deviates far from that you will not be able to make backup copies. Drive speed is easily corrected. We suggest you get one of the commercial drive speed and alignment programs if you believe this to be your problem.
- 3) There is a remote possibility you have an unusual ROM in your drive. Commodore made a number of changes in the operating system over the years. There is a very small chance you have one that will not work with this program. We must emphasize this is only a very small possibility.

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Special Notes

Returning to Menu

Modes 9, 0, and S of the C64 Mode facilitate a return to the main menu after operation. Modes 5, 6, 7, and 8 do not. The program will have to be rebooted after using these modes.

Software List

If you have used the Rocket Loader when booting the Software List you will not be able to use the 'F7' option to boot the copier menu.

1541 Conversion

If you are experiencing problems returning to the Main Menu from modes 9, 0, or S load and run the program from the Mirror disk called 1541 Conversion. This program will modify the Mirror disk and make it compatible with 1541 drives only. If you decide to use this program, please run it on a backup copy of the Mirror only.

1571 Conversion

If you have used the 1541 Conversion routing you may use this program to restore your copy of the Mirror disk to its original condition.

THE MIRROR DISK COPIER
C64/128

Owner Registration

Last Name: _____ First Name: _____

Street Address: _____

City/State/Zip: _____

Phone: () - _____

Programs Copied: _____

Programs Unable to Copy: _____

Comments or Suggestions: _____

Please return to Compumed, Box 6939, Salinas, CA 93912

